

## CLAIMS

1. An illusion toy comprising a housing having a side wall defining a bounded area, said side wall having an elongate slot extending perimetrically, a windowed front cover coextensive with said bounded area, said cover being formed with an article receiving through hole, a partition spaced rearward of said front cover defining therewith and with the side wall, a front compartment and, a rear cover defining with said side wall and partition a mechanism compartment concealed behind said partition, said partition and said rear cover having respective through holes aligned with the through hole on said front cover, said partition having a shaft opening in it, offset from the through holes, and an illusion producing mechanism having a shaft extending perpendicularly to said partition through said shaft opening into the front compartment, said shaft carrying at a front end a blade extending parallel to said partition and extending radially from said shaft a distance greater than the distance between the shaft and said article receiving through hole, a pinion connected to a rear end of said shaft and axially aligned therewith, an arcuate segment rack engaging said pinion, an elongate actuating lever pivotally mounted between its longitudinal ends in the rear compartment and having an outer trigger forming end projecting through and beyond said sidewall slot out from the housing and an inner end with means for anchoring a spring, and overcenter means operatively connected to said lever and said segment rack for rapidly and suddenly displacing said rack in response to movement of said lever through a given arc past an overcentered position, whereby said pinion, shaft, and hence said blade is rotated too rapidly to be seen through at least 270 degrees from a rest position on one side of said article receiving through hole to a rest position to the other side thereof, said overcenter means comprising a quadrant yoke mounted on a pivot within said rear compartment, said quadrant yoke having arms between outer ends of which the segment rack extends and having means for anchoring a spring at a location spaced apart from the pivot, and a spring having one end mounted by the spring anchoring means of the actuating lever and its other end by the spring anchoring means on said quadrant yoke, the improvement residing in that:

the actuating lever arm is pivotally mounted at a location further away from the trigger forming end than the article receiving through hole and is formed with a loop at a location adjacent the through hole so that the actuating lever extends across the rear compartment past the through hole without crossing the through hole in all operative positions but appears to have crossed the article receiving through hole to a spectator viewing the trigger forming end during movement to opposite sides of the article receiving through hole to actuate the overcenter mechanism, enhancing an illusion that the blade has also moved across the article receiving through hole.

2. An illusion toy according to claim 1 wherein the spring is a hairpin spring and has spring arms with upturned free ends and the anchoring means on the actuating lever and quadrant gear comprise respective anchoring holes receiving respective upturned ends.

3. An illusion toy according to claim 1 wherein teeth of the segment rack are located along an outer circumference thereof, remote from the pivot.

4. An illusion toy according to claim 1 wherein the article receiving through hole is sized for receiving a person's finger extending completely through the housing so as to be clearly visible, protruding from front and rear faces of the housing.

5. An illusion toy according to claim 1 wherein a portion of the housing side wall extending in a quadrant containing the article receiving through hole and between rest positions of the visible trigger portion of the actuating lever and the blade on opposite sides of the article receiving through hole is arcuate, but opposed portions of the housing side wall extending away from such quadrant are non arcuate and of reduced separation, providing an optical illusion to the casual spectator that there is insufficient clearance with the opposed portions of the housing side wall for the blade to rotate between rest positions, away from the article receiving through hole, in which the blade would not sweep across the article receiving through hole

6. An illusion toy according to claim 5 wherein the windowed front cover is transparent over only a portion of the front compartment adjacent the arcuate portion of the side wall to reveal only the through hole and an article extending therethrough and rest positions of the blade on respective opposite sides of the through hole so that a portion of actual rotational blade movement remote from the through hole is hidden behind an opaque portion of the housing.

7. An illusion toy according to claim 6 wherein a surface portion of the partition visible through the windowed front cover in the quadrant is formed with the through hole and behind the rest positions of the blade is marked with radially extending, colored bands which expand in width as they extend radially outward to increase the apparent size of such surface portion.

8. An illusion toy according to claim 7 wherein the front cover of the housing has a boss shape portion at a lower peripheral edge of the transparent portion and a colored blob representing an apparent pivot point for the sword is marked thereon at a central location corresponding to the geometric center of the arcuate portion whereas the blade is pivotally mounted at an actual pivot point located closer to the arcuate side wall than the blob and concealed behind the boss and the bands appear to emanate from the blob thereby providing an, at least fleeting, impression that the pivot point of the blade coincides with the blob and that the blade is therefore of greater length than an actual length of the blade, enhancing the impression of insufficient clearance for blade rotation in a direction way from the through hole.

9. An illusion toy according to claim 8 wherein the blade has a longitudinal edge portion one of a zig-zag and other, non linear shape, with a radially innermost visible portion spaced a small distance from the pivot extending in the direct of the blob which enhances the impression of the pivot point of the blade being coincident with the blob

and, therefore, of the sword being longer than an actual length.

10. An illusion toy according to claim 1 wherein gear teeth are located on an outside surface of the rack segment remote from the pivot point of the segment gear

11. An illusion toy according to claim 1 wherein a surface of the partition behind the blade and adjacent the article receiving through hole provides a display surface for advertising messages for viewing through the windowed cover, thereby to increase their impact by association with the illusion.

12. An illusion toy according to claim 5 wherein abutments are molded at opposite locations on interior surfaces sides of said housing and stop members project from respective opposite ends of the rack which stop members impact respective abutments at the end of blade rotation, producing a loud noise.

13. An illusion toy according to claim 6 wherein said opaque portion of the housing forms as a rear wall of one of a store of dispensable items and a functional mechanism overlying an extremity of the rotational path of the blade and visible to a spectator through the front cover.

14. An illusion toy according to claim 13 wherein said dispensable items comprise candy.

15. An illusion toy according to claim 14 wherein said store is formed by a handle and an item dispensing chute formed by said front cover.

16. An illusion toy according to claim 1 wherein the trigger of the actuating lever comprises a writing implement.

17. A combined illusion toy and candy dispenser comprising a housing having a side

wall defining a bounded area, said side wall having an elongate slot extending perimetrically, a windowed front cover coextensive with said bounded area, said cover being formed with an article receiving through hole, a partition spaced rearward of said front cover defining therewith and with the side wall, a front compartment and, a rear cover defining with said side wall and partition a mechanism compartment concealed behind said partition, said partition and said rear cover having respective through holes aligned with the through hole on said front cover, said partition having a shaft opening in it, offset from the through holes, and an illusion producing mechanism concealed in the mechanism compartment having a shaft extending perpendicularly to said partition through said shaft opening into the front compartment, said shaft carrying at a front end a blade extending parallel to said partition and extending radially from said shaft a distance greater than the distance between the shaft and said article receiving through hole, an elongate actuating lever pivotally mounted in the rear compartment and having an outer, trigger forming end projecting through and beyond said sidewall slot out from the housing and an inner end operatively engaging the mechanism whereby manually moving the trigger causes said mechanism to rotate said shaft, and hence said blade rapidly through at least 270 degrees from a position on one side of said article receiving through hole, away from said through hole, to a position to the other side thereof, while providing an illusion that the blade has rotated in an opposite rotational direction across the article receiving through hole, the housing further comprising means for dispensing candy.

18. A combined illusion toy and candy dispenser according to claim 17 wherein the means for dispensing candy extends in front of and obscures a radially outer portion of a rotational path of the blade so as to provide an impression that rotational movement of the blade in a direction away from the through hole would be blocked by the presence of the candy, thereby enhancing the illusion that the blade has rotated across the article receiving through hole.

19. A combined illusion toy and candy dispenser according to claim 18 wherein

the means for dispensing candy comprises a hollow handle storing candy communicating with a candy delivery chute extending in front of and obscuring a radially outer portion of a rotational path of the blade.

20. A combined illusion toy and candy dispenser comprising a housing having a front, windowed compartment in which a blade is rotated too rapidly to be seen in one direction through an arc of more than 270 degrees between rest positions on opposite sides of an article receiving through hole by a mechanism concealed in a rear compartment of the housing, blade rotation being triggered by arcuate movement of a trigger end portion of an actuating lever which protrudes visibly from the rear compartment adjacent the through hole, with start and finish positions of the movement of the visible trigger end portion of the actuating lever being on same opposite sides of the through hole as start and finish positions of the blade, creating an illusion that the blade also has moved with the trigger end portion of the actuating lever in an opposite direction across the through hole, the housing further comprising candy dispensing means for holding candy extending across the housing in front of and obscuring a radially outer portion of a rotational path of the blade so as to provide an impression that rotational movement of the blade in a direction away from the through hole would be blocked by the presence of the candy, thereby enhancing the illusion that the blade has rotated across the article receiving through hole.

21. A combined illusion toy and candy dispenser according to claim 20 wherein wherein said candy dispensing means comprises a handle containing candy communicating with a candy dispensing chute..

22. An illusion toy of a type comprising a housing having a front, windowed compartment in which a blade is rotated too rapidly to be seen in one direction through an arc of more than 270 degrees between rest positions on opposite sides of an article receiving through hole by a mechanism concealed in a rear compartment of the housing, blade rotation being triggered by arcuate movement of a trigger end portion of

an actuating lever which protrudes visibly from the rear compartment adjacent the through hole, with start and finish positions of the movement of the visible trigger end portion of the actuating lever being on same opposite sides of the through hole as start and finish positions of the blade, creating an illusion that the blade also has moved with the trigger end portion of the actuating lever in an opposite direction across the through hole, the improvement residing in that the trigger end portion of the actuating lever comprises a writing implement.

23. An illusion toy comprising a housing having a side wall defining a bounded area, said side wall having an elongate slot extending perimetrically, a windowed front cover coextensive with said bounded area, said cover being formed with an article receiving through hole, a partition spaced rearward of said front cover defining therewith and with the side wall, a front compartment and, a rear cover defining with said side wall and partition a mechanism compartment concealed behind said partition, said partition and said rear cover having respective through holes aligned with the through hole on said front cover, said partition having a shaft opening in it, offset from the through holes, and an illusion producing mechanism concealed in the mechanism compartment having a shaft extending perpendicularly to said partition through said shaft opening into the front compartment, said shaft carrying at a front end a blade extending parallel to said partition and extending radially from said shaft a distance greater than the distance between the shaft and said article receiving through hole, an elongate actuating lever pivotally mounted in the rear compartment and having an outer, trigger forming end projecting through and beyond said sidewall slot out from the housing and an inner end operatively engaging the mechanism, whereby manually moving the trigger causes said mechanism to rotate said shaft, and hence said blade too rapidly to be seen through at least 270 degrees from a rest position on one side of said article receiving through hole, away from said through hole, to a rest position to the other side thereof, while providing an illusion that the blade has rotated in an opposite rotational direction across the article receiving through hole;

wherein a portion of the housing side wall extending in a quadrant containing the

article receiving through hole and between rest positions of the visible trigger portion of the actuating lever and the blade on opposite sides of the article receiving through hole is arcuate, but opposed portions of the housing side wall extending away from such quadrant are non arcuate and of reduced separation, providing an optical illusion to the casual spectator that there is insufficient clearance with the opposed portions of the housing side wall for the blade to rotate between rest positions, away from the article receiving through hole, in which the blade would not sweep across the article receiving through hole

24. An illusion toy comprising a housing having a side wall defining a bounded area, said side wall having an elongate slot extending perimetrically, a windowed front cover coextensive with said bounded area, said cover being formed with an article receiving through hole, a partition spaced rearward of said front cover defining therewith and with the side wall, a front compartment and, a rear cover defining with said side wall and partition a mechanism compartment concealed behind said partition, said partition and said rear cover having respective through holes aligned with the through hole on said front cover, said partition having a shaft opening in it, offset from the through holes, and an illusion producing mechanism concealed in the mechanism compartment having a shaft extending perpendicularly to said partition through said shaft opening into the front compartment, said shaft carrying at a front end a blade extending parallel to said partition and extending radially from said shaft a distance greater than the distance between the shaft and said article receiving through hole, an elongate actuating lever pivotally mounted in the rear compartment and having an outer, trigger forming end projecting through and beyond said sidewall slot out from the housing and an inner end operatively engaging the mechanism, whereby manually moving the trigger causes said mechanism to rotate said shaft, and hence said blade too rapidly to be seen through at least 270 degrees from a rest position on one side of said article receiving through hole, away from said through hole, to a rest position to the other side thereof, while providing an illusion that the blade has rotated in an opposite rotational direction across the article receiving through hole;



wherein the windowed front cover is transparent over only a portion of the front compartment adjacent the arcuate portion of the side wall to reveal only the through hole and an article extending therethrough and rest positions of the blade on respective opposite sides of the through hole so that a portion of actual rotational blade movement remote from the through hole is hidden behind an opaque portion of the housing.

25. An illusion toy comprising a housing having a side wall defining a bounded area, said side wall having an elongate slot extending perimetrically, a windowed front cover coextensive with said bounded area, said cover being formed with an article receiving through hole, a partition spaced rearward of said front cover defining therewith and with the side wall, a front compartment and, a rear cover defining with said side wall and partition a mechanism compartment concealed behind said partition, said partition and said rear cover having respective through holes aligned with the through hole on said front cover, said partition having a shaft opening in it, offset from the through holes, and an illusion producing mechanism concealed in the mechanism compartment having a shaft extending perpendicularly to said partition through said shaft opening into the front compartment, said shaft carrying at a front end a blade extending parallel to said partition and extending radially from said shaft a distance greater than the distance between the shaft and said article receiving through hole, an elongate actuating lever pivotally mounted in the rear compartment and having an outer, trigger forming end projecting through and beyond said sidewall slot out from the housing and an inner end operatively engaging the mechanism, whereby manually moving the trigger causes said mechanism to rotate said shaft, and hence said blade too rapidly to be seen through at least 270 degrees from a rest position on one side of said article receiving through hole, away from said through hole, to a rest position to the other side thereof, while providing an illusion that the blade has rotated in an opposite rotational direction across the article receiving through hole;

wherein the partition has a front surface carrying a graphic behind the blade depicting a figure in a blade holding position, the figure having a center offset further away from the through hole than the shaft of rotation of the blade and the shaft being

located intermediate longitudinal ends of the blade so as to provide a fleeting illusion that a pivotal center of the blade is located at the center of the figure further away from the through hole

26. An illusion toy according to claim 25 wherein the blade comprises a sword with a handle and profiles of sword holding hands are marked on the handle at a location aligned with to the center of the figure thereby to enhance the illusion that a pivotal center of the blade is located at the center of the figure further away from the through hole